



VOLUME 63 ISSUE 11

November 2013

ARRL AFFILIATED-SPECIAL SERVICE CLUB

PPRAA ~75 years

Pikes Peak Radio Amateur Association (PPRAA) was established in the early- to mid-1930s. Unfortunately we have not yet been able to ascertain the exact year establishment. PPRAA was incorporated in 1963 as

"Pikes Peak Radio Amateur Association, Inc." stating that this corporation shall have perpetual existence with many purposes. The first purpose on incorporation listed is:

"To conduct a social and technical membership organization for the purpose of furthering the knowledge of its members in the art of radio communications, and in furtherance of such purpose to hold meetings, social gatherings, outings, and other similar activities"

November 1983

30 years ago: Darla WBØDUV, ARRL ACC, came down from Denver to congratulate the club on its Special Service Club status effective September 28, 1983, and its status as the first Colorado club carrying that status. The club will spend \$15 for a hot stamp badge to be made with the club logo, and personal badges can be made for 70 cents plus 10 cents per letter. Mark B9NFE of the National Guard is looking for ham help in their RTTY section. A motion was passed to have the club look into meeting at the Nazarene College. Elections were held,

and Joe N9ENM is our new president. The board recommended a calling tree to notify club members of time-sensitive issues. The board is considering a "life" membership for club members, with a portion going towards a scholarship fund. The Chapel Hills Mall demonstration will be held on November 11 and 12. A liability insurance policy is required, and the club will purchase a \$1,000,000 policy. The November program will be on the Red Cross.

PPRAA Club Officers

President	Michael Derbort	KCØELG	Board member	Tom Brereton	WØTOM
Vice President	Jim Bishop	KDØKQL	Board member	Doug Nielsen	N7LEM
Secretary	John Wishart	NGØI	Board member	Diana Nordstrom	KCØNPP
Treasurer	Pam Scott	WØPRS	Board member	Jim Rader	KDØNQM
			Board member	Jim Harris	WØEM
			Board member	Virgil Yost	NØXRS
Ø-Beat Editor	Dan Scott	WØRO	Board member	Chris Schroeder	KDØUQI

All PPRAA board of directors can be contacted at: boardmembers@ppraa.org

All PPRAA officers can be contacted at: officers@ppraa.org

Scholarship fund

Dear Amateur Radio Enthusiast,

I once read that to make a difference in public life, you have to participate in public life. This is just a simple but powerful message that can be traced back to the ancient Greeks.

The Pikes Peak Radio Amateur Association is built on that philosophy. The PPRAA strives to provide educational and recreational activities for its members intended to further their knowledge in the art of radio communications. The PPRAA encourages its members to participate in public service communications, civil defense, charitable fund drives and other activities for which amateur radio is particularly adapted. In this spirit of public service the PPRAA embarked over three years ago on creating a scholarship fund to promote undergraduate students to excel in the Engineering and Sciences. The fund will award one \$1000 scholarship per year and be open to any student who is pursuing an undergraduate degree in either Engineering (Electrical, Civil, Mechanical, Chemical, Aeronautical, Astronautical) or the hard sciences (Physics, Chemistry, Computer Science) at any accredited university with an emphasis on Colorado institutions. The scholarship program will be managed by the Foundation for Amateur Radio located in Washington, DC and with help from Amateur Radio enthusiasts such as you; it will be ready for the 2014 school year.

This is why I am asking for your support for the **Pikes Peak Radio Amateur Association Scholarship Fund**. Your contribution to this scholarship fund will help attract the most highly talented people by providing financial aid to undergraduate students who demonstrate a dedication to working in the public interest. We know the impact our own education has had on our careers and the quality of our work. And as

former students, we also know the importance of scholarship funds in assisting and encouraging students to begin, and complete, their undergraduate education. I ask you to help lead the way in supporting the future. Please join me in Investing in our future with a gift to the **Pikes Peak Radio Amateur Association Scholarship Fund**. Your contribution will make an enormous difference to some deserving student. As President of the Pikes Peak Radio Amateur Association, I am pleased to say that all of the PPRAA Officers have made pledges to the **Pikes Peak Radio Amateur Association Scholarship Fund**, and I hope you will follow our example and make your own gift. We have set an ambitious goal of raising \$30,000 to make this scholarship available to students for years to come. We are counting on you to help us meet this challenge. Thank you. I look forward to hearing from you.

Sincerely,



Michael Derbort
President
Pikes Peak Radio Amateur Association

PS: Please take a moment and send your gift; your gift is important and we appreciate your support. If you are not a member of the PPRAA please consider joining. Cost is only \$15 a year for individual membership or \$18 for a family. Details and a membership application can be found at our website at www.ppraa.org.

To ensure unbiased awarding of the scholarship, isolate financial responsibly, and allow scholarship award professionals to manage our scholarship fund, PPRAA elected to use the Foundation for Amateur Radio (<http://www.farweb.org/>)

YOUR TAX EXEMPT DONATIONS MAY BE SENT TO:

Donate - Mail checks to:
PPRAA
PO Box 16521
Colorado Springs, CO 80936

Donate via the web:
<http://ppraa.org/donations>

Donate – Make checks to:
“PPRAA Scholarship Fund”
Mail to:
FAR Scholarship Committee
P.O. Box 911
Columbia, MD 2104

PPRAA Social Media

PPRAA.org

The PPRAA.org web site provides additional club information, useful links, propagation information and much more

ppraa.forumotion.net

Very lightly used. This is intended to allow on-going discussion on area amateur radio activities.

Facebook

From the link on PPRAA.org, in Facebook find "PPRAA-Pikes Peak Radio Amateur Association".

Google+

From the link on PPRAA.org, in Google+ find "PPRAA-Pikes Peak Radio Amateur Association", or follow the link

PPRAA Club Meetings

"HAM" breakfast



All are warmly invited to come on down and join us!

Bunz
11550 Ridgeline Drive
Saturday, 2 November 2013
Time is from 8:00-9:30 AM

The "HAM" breakfast is generally held the first Saturday of the month with periodic QSY to other dates based on QRM of other local or state activities.
The "HAM" Breakfast location moves around town providing an occasional location near you.

Board Meeting



Daniel's Taco Shop
6817 Space Village Ave
(Just outside the north gate of Peterson AFB)

Board Meetings are open to all members.
Meeting starts at 6:30 PM

Membership Meeting



November 13th 7 pm
IHop on Stetson Hills Blvd
5749 Stetson Hills Blvd
(Just west of Powers Blvd).

The General membership meetings are open to all amateur radio operators, those interested in amateur radio, and guests. This meeting

consists of club business and an interesting presentation. The meetings are the 2nd Wednesday of the month.
Although the meeting starts at 7 PM, we generally start gathering around 6 PM allowing time for an eye-ball QSOs, friendly banter, and informal committee discussions. Most people will order off the menu, eat and enjoy meeting new (or old), friends over the meal

Thursday Night Net



Every Thursday evening (some holiday exceptions) the PPRAA holds a net starting on 10 Meter at 28.390 USB.

The net is open to all licensed amateur radio operators. Many technician licensees have made their first HF (or their very first ever) contact on this net.

This very informal net provides a forum for you to better understand your radio(s). Drop by to just say "howdy",

or ask to try a different mode such as 10-meter FM, AM, DSB...etc.

Maybe you have a new microphone, antenna, rig, etc.. So, besides just checking like you do on those other nets, feel free to jump in and say "I have a new microphone, how does it sound?", "...how about now" or "I just built this antenna how is it doing?", "... this is the other one, how does it compare", or "I want to try something of 440...", In a nutshell the net is simply a friendly way to play with your new or ancient gear; try modes you are curious about...etc.

November Meeting Topic

Have you ever wondered how Storm Chasing and Amateur Radio can mix? Well, look no further than the November 13th, 2013 PPRAA general membership meeting. United States Storm Chasers member Christopher Schroeder will be sharing this topic.



During the meeting there will be explanations, examples and additional “top secret” glimpses of things to come over the next 2 years. So, don’t just sit there like a bump on a log wondering about this dangerous yet important activity, come to the PPRAA meeting, LIVE and in person! See you there!

The Monster Storm

National Geographic – November 2013 – (Ø-Beat Editor)

May 24th 1973, April 26th 1991, May 4th 2007, May 3rd 1999, May 22nd 2011 and May 13th 2013 are dates that live in the hearts of storm chasers. These dates represent horrific weather events and in order, Union City, Oklahoma; Plains Tornado Outbreak; Greensburg, Kansas; Bridge Creek-Moore, Oklahoma, Joplin, Missouri and finally the day the greatest storm chaser, Tim

Samaras (WJØG), an extremely careful chaser who always opted for safety was caught by a subvortex near El Reno, Oklahoma.

The November 2013 National Geographic has an excellent article on pages 35-63. If you are interested in Tim’s life, storms, storm chasing, super cells, or this particular super cell, I recommend reading this article.

Board meeting – Summary

Board of Director meeting - summary

The board meeting was attended by Michael Derbort (KCØELG), Jim Bishop (KDØKQL), Jim Rader (KDØNQM), Pam Scott (WØPRS), Dan Scott (WØRO), Virgil Yost (NØXRS), Doug Nielson (N7LEM), Diana Nordstrom (KCØNPP), Mike Anderson (WV7T). There was discussion concerning the next steps for the club station centering on the need for a storage shed to remove any reason to clutter the station with storage items. We are waiting on the land use agreement to be signed before putting up towers and installing the solar panels. Electronic Media is slowly growing. Michael volunteered to see if there was a way for someone that wants to donate to the scholarship fund to donate direct. ARES and the Salvation Army will need help with Thanksgiving and Christmas dinners. Members can find the complete Board Meeting minutes under the download section of ppraa.org web site.

Membership meeting – summary

A moment of silence held for silent key K9BWI, Richard Olson. Asset Committee – Waiting for Land Agreement to be finalized before putting up a storage shed. The storage shed is intended to allow all assets to be stored in one place. Club station, need automated ventilation system, put up antennas, pick up solar array. Megafest 2014 proposed dates are June 14th or July 26th. Megafest raffle prizes were set to not exceed \$3,000. COQP plaques are still available for sponsorship. Christmas party location is IHOP; normal meeting time, normal place.

Nancy, K5NLM, a PPRAA member, who lives close to the eastern border of Colorado is looking for repeaters, radio...etc. This area does not have repeater coverage and are hoping to resolve that issue. Next meeting is Wednesday, 13 November 2013 at the normal IHOP.

Congratulations to the Board and Officers of 2014.

Submitted by Michael Derbort KCØELG, PPRAA President

I just wanted to congratulate the new Board of 2014. It is a nice to see some new faces joining the leadership team. I also want to thank the membership for their continuing support. I look forward to an exciting new year as we get our club station online; a new Megafest with great new raffle prizes; continuing our annual

scholarship award, and supporting our friends in ARES, CMRG, PPFMA, and other local clubs and organizations. However, we can't do this alone so if you would like to donate your time to helping with any of the clubs activities please contact any of the board or officers. Thanks again and 73 Michael Derbort, President.

Club Station

The Club Station continues to be a work in progress. The building/trailer is mostly ready to be populated with equipment. We did leave the floor overlay loose for the time being to allow access to the original surface. There are a few repairs that need to be made such as replacing a ceiling closure with a thermostat regulated fan unit.

We are finalizing the land-use agreement before putting up the three towers and moving the solar panels into place. The PPRAA station committee is studying a proposal for both a storage shed and car-port structure to better protect the trailer. If you have question or want to be part of the station committee please email station@ppraa.org

PPRAA Logo'd "stuff"

*Both **Silk Screen and Embroidered** (Shirts, T-Shirts, Hats, Badges, etc.), members pay for individual shirts. Embroidered - Club logo = \$7. Call sign and name ordered together = \$7, Call sign or name ordered separately = \$5 each. The number to call to order is: (719) 591-6151. Monograms by Jane.*

***Silkscreened** - T-Shirts with a one color left chest logo only no name or call sign: Small thru Xlarge: \$8.75 ea. T-Shirts with one color logo on left and name with call sign on right side: Small thru Xlarge: \$9.60 ea. for XXlarge add \$2.00 per shirt. POC Dick Thompson, WØRAA 719-520-0288*

CONTESTS

For those testers in the club, or those curious about contesting below is a subset of contests the Ø-Beat editor thought interesting.

*The **WA7BNM Contest Calendar**. site provides detailed information about amateur radio contests throughout the world, including their scheduled dates/times, rules*

summaries, log submission information and links to the official rules as published by the contest sponsors. The url for this information can be found at:

<http://www.hornucopia.com/contestcal/weeklycont.php>

The following lists the Start Date and a contest description. More information can be found at the above link.

*Nov 2 – ARRL Sweepstakes, CW
Nov 3 – DARC 10-Meter Digital
Nov 9 – WAE DX, RTTY
Nov 9 – 10-10 Int. Fall, Digital
Nov 9 – Kentucky QSO Party*

*Nov 16 – ARRL EME
Nov 16 – ARRL Sweepstakes, SSB
Nov 18 – Run for the Bacon QRP
Nov 21 – NAQCC Straight Key/Bug Spring
Nov 23 – CQ Worldwide DX, CW*

PPRAA Club Activities

Gordon WØRGD – Ute District Camporee – BSA

Gordon is a retired army medic. He enjoys SkyWarn, chasing DX, as well as special event stations. "I'm still new enough that I enjoy collecting paper". Gordon is a district commissioner in Ute district Pikes Peak Council BSA. Article by: Dan Scott, WØRO



Gordon (WØRGD) helped Boy Scouts at the Ute District Camporee that was held at the mosquito infested Turkey Creek army recreation area South of Colorado Springs. As you know, here in the Colorado Springs area, if you see 3 mosquitos it is an infestation, this must have been an all-out mosquito invasion!

Gordon's objective at the camporee was to introduce Scouts to amateur radio and was successful making numerous 2-meter simplex contacts. Pam (WØPRS) dropped by then walked out of site and preceded to talk to many of the scouts using her HT. Pam a past Ute district awards chairman and Gordon an Eagle Scout and District Commissioner provide a lot of common ground for an easy transition to the microphone!

While Gordon and Pam were getting Scouts on the air, Dan was working on getting an HF station setup. On HF, sideband, CW, SSTV and other modes were demonstrated or discussed.

It was a great success and the Spring planning committee is already asking Gordon if he can setup at the Spring camporee.

Jamboree On-The-Air – Pikes Peak Council Venturers

By: Dan Scott, WØRO

Zack, the Venturing Council Program Director, for the Pikes Peak Council contacted Dan, WØRO, and the PPRAA about Jamboree-On-The-Air (JOTA) and Jamboree-On-The-Internet (JOTI) which he wanted to have October 19th from 10:00 AM until 2:00 PM at the Boy Scouts of America (BSA) center on Fillmore Road. Zack is a life scout in Boy Scout Troop 1 as well as a

Venture Scout. Venturing is a co-ed program for ages 14 to 21.



Many venturing crews are focused on outdoor activities. So we focused a lot on amateur radio that is used outside. The following operators were present: Joe

(AGØD) from Cheyenne Mountain Repeater Group (CMRG), Paul (WØRW) pedestrian mobile, Shel (KFØUR) QRP mountain topping, and PPRAA representatives Gordon (WØRGD), Pam (WØPRS) Virgil (NØXRS), and Dan(WØRO).

Setup started at 8:30 AM with Dan setting up the Flex-5000 with help from Zack. Joe, Shel, Dan, Zack, and other Venturers put up a crank-up tower Joe brought with the apex of the G5RV up around 30 feet. We were ready to go by 10:00.

A quick contact to a Worked All Germany contestant, was exciting to the group of Cub Scouts, Boy Scouts, and Venturers. After that we made SSB contacts with a number scout camps around the US.

Next the G5RV was connected to the Elecraft KX3 and Shel demonstrated CW operation. Shel made a few QRP CW contacts which seemed to "wow" the scouts. Paul was there from the start with his pedestrian mobile, he made a number of contacts, including working WØRO JOTA station on 10-meters. Great signal Paul!

"Oh, COOL! Are you texting over the radio?" PSK-31 was a big hit. The majority of the scout-to-scout contacts were made on PSK-31. The scouts are definitely at home around a keyboard and "texting"! BUT, the biggest surprise was a very strong PSK-31 signal from WØRW/PM.

We were told to expect 10 to 15 scouts and that was right in the ball-park for the numbers. Everyone had a great time and it was fun seeing the various modes of communications including SSB, CW, Packet, and Internet Scouting specific chat rooms. This was a very successful, locally small, international scouting event.

Emergency Communications

Pikes Peak Amateur Radio Emergency Service – PARES

Submitted by John Bloodgood.

John (KDØSFY) is the Public Information Officer for PPARES and a member of PPRAA.

Summer 2013

The weather, obviously, caused a lot of problems for our friends up north this summer. Although Pikes Peak ARES was never activated for mutual assistance, there were a couple times when it looked like some of our folks might be needed.

Flooding

State-wide, the ARES response to the flooding has been lauded by the ARRL HQ and several newspaper articles and video spots featuring ham radio were run. Locally, we were more concerned with the Waldo Canyon Fire burn scar and local flooding along US 24, Manitou Springs, Black Forest, and Colorado Springs, but we largely dodged the bullet and while we did provide ARES/SKYWARN weather observations to NWS - Pueblo, the Colorado Springs city EOC never activated us for flood watch.

Events

Big special event last month was the American Diabetes Association's Southern Colorado "Tour de Cure", where we supported over 300 riders and had about 29 operators spread out from Larkspur to Navigators and east to Black Forest. We have received kudo letters and pictures, some of which can be found on the PPARES Facebook page www.facebook.com/PikesPeakARES.

Big event in October was the General Membership meeting on the 23rd. We also are supporting the

Salvation Army Thanksgiving and Christmas dinners in November and December.

Training

Regarding training, Jarrett, NMØV, is pushing to get everyone to have their IS-100 and IS-700 courses complete by the end of the year. These two courses are free, online, pretty easy, and the absolute minimum requirement for the FEMA courses for most incidents. It is recommended that people complete these two before tackling IS-200 and IS-800.

Leadership Changes and re-organization

There is a change in leadership happening for PPARES. The District Emergency Coordinator, Dr. Rich Russel, ACØUB, has been selected by the Colorado Section Manager and Colorado Section EC to lead the entire South Central Region (Region 2) of Colorado. The selection process for a new EC for PPARES (Region 2 District 2) has begun and we expect an announcement shortly.

For those who have not been following the happenings in PPARES, a quick recap: PPARES is no longer District 14. The state EC reorganized Colorado ARES into nine regions and each region into several districts, resulting in PPARES now being R2D2. After the July General Membership meeting, I (John Bloodgood, KDØSFY) was appointed as Public Information Officer for PPARES.

Bob's Blog

The following is an article from Bob's blog found at <http://www.k0nr.com/wordpress>

Bob is a long time PPRAA member. Bob enjoys getting ideas committed to written text and almost always has some kind of writing gig going. Currently, Bob is a Contributing Editor for [CQ VHF Magazine](#), writing the FM Column. Bob also contributes to [HamRadioSchool.com](#), writing the [Shack Talk](#) column and contributing to the amateur radio license books. In the past, Bob has had articles in QST, QRP Quarterly and other magazines.

A Soggy Mount Herman SOTA Activation (WØ/FR-Ø63) – KØNR



Although I've operated a number of [VHF contests](#) from the summit of [Mount Herman](#), I had not yet activated it as a Summits On The Air (SOTA) peak. Mount

Herman is a 9063 foot mountain just to the west of Monument, Colorado, pretty much in "my back yard." [Steve WØØAT](#) did the first SOTA activation of Mount Herman, back in May 2010, chronicled [here in one of his famous videos](#). There is a sometimes rough Forest Service Road 320 that leads to the trailhead, then it's a little more than a [one mile hike to the top](#) with 1000 feet of elevation gain. I call it a tourist hike, since it has just enough challenge to make it feel like a climb and there's a great view at the top. At least on most days.

I was not expecting much of a view today since low rain clouds were dominating the sky. I was just hoping I would not get completely drenched by rain. The weather was definitely marginal but from my house I saw the clouds lift a bit, so I thought it was worth a try. The ARRL September VHF Contest is also this weekend, so it was a great combo opportunity: SOTA + VHF Contest.

I hopped in the Jeep and quickly made the drive to the trailhead. Then I scooted on up the trail, making it to the

summit in about 30 minutes. Just as I reached the summit, the rain really kicked in. I set my gear down under a tree, got out my HT, attached the 1/2-wave antenna and started calling on 147.42 MHz. I wanted to bag my four SOTA qualifying contacts in case the weather turned worse. I quickly worked Frank KØJQZ and Steve WØØAT. Then George ABØYM, operating as a rover in the VHF contest called me from grid DM78, so I worked him as well.



I had my trusty Arrow Yagi antenna with me but I didn't want to bother with assembling it in the rain. I got out the FT-817, put a vertical antenna on it and called on 144.200 USB. I found stations working the VHF contest and completed QSOs with them: WBØRRU and K3ILC.

The rain intensified so I abandoned the summit and headed back down. All in all, it was not a great hike but I was successful in activating Mount Herman.

73, Bob KØNR

Note: Article reprinted with permission from KØNR

SOTA Information

(Ø-Beat Editor)

Summits On The Air (SOTA) is an award system for those activating and those chasing summit contacts around the world. An "activator" is the person that hikes to the peak of a mountain carrying their station then making contacts from the peak of that mountain. The "chaser"

is equally important; these are the people that make contacts with the Activator. Points are awarded to both the Activator and Chaser based on the activation difficulty.

For more information see <http://www.sota.org.uk/> or NA-SOTA (North America) see <http://na-sota.org/>

Getting HF Antennas to work. Part 6

This is the last in a series of submissions by Ralph WDØEJA. Ralph owns the Bilal Company and makes a series of antennas which may be found at wdøeja@isotronantennas.com. The Bilal Company can be found at 137 Manchester Drive, Florissant, CO. 80816. PH/FX 719/687-0650. You can write to Ralph at wdøeja@isotronantennas.com.

In the last article a Series Resonant circuit was described. This is where an inductor and capacitor are wired in series. When the 2 reactance's become equal, we are at the resonant frequency. We also have a minimum Z or impedance of the circuit. At this point the impedance of the circuit looks like a resistor, with no reactance showing.

On small circuits, such as in your radio, the impedance or Z is close to 0 ohms. This is good for radio circuitry, but not for antennas.

Making the circuit physically larger causes another affect. It is called Radiation Resistance. As the physical area of the antenna increases, the Radiation resistance will also. This is in respect to a Series Resonant circuit with nothing else added. This value will increase only so far. It will also vary in respect to the design, shape and location of the circuit.

Ideally you want 50 ohms. Most antennas will come close to this. Dipoles can go higher since they are floating above ground. This is good however. A higher Radiation Resistance means the antenna is operating at a higher voltage. This means less loss from the antenna. 50 ohms matches our transmitter for a 1:1 SWR. If the antenna is above this value, matching with a Tuner will work well, with no noticeable loss. If the antenna design makes it lower than 50 ohms, the current is higher in the circuit and can create losses.

Now we have 3 values to our antennas that we need to look for:

- Resonance, which has Inductive
- Capacitive reactance
- Radiation Resistance.

Actually there is a 4th element, the pure resistance of the parts of the antenna. Normally this resistance is low enough as to not have much effect.

How do we use this?

First we need to remove any type of reactance. That means we find the resonant point first. This will offer a pure resistance and leave us now with only the Radiation Resistance.

If the SWR at minimum or resonant point is 2:1, we have two values, but only 1 is right. Either the antenna is at 25 ohms, or it is at 100 ohms. SWR values that are higher at resonance mean the Radiation Resistance value is either lower or higher in value than 50 ohms. How can we take the guess work out of tuning an antenna? The next article will start to address this.

73,



Ralph WDØEJA

OCTOBER 2013

If you have questions about the product or articles feel free to contact me.

BILAL COMPANY

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FLORISSANT, CO. 80816

U.S.A

PH/FX: 719/687-0650

wdøeja@isotronantennas.com

Licensing Prep & Testing

Licensing and upgrading

Material including ARRL publication and technical books can be found locally at Centennial Electronics.

Centennial Electronics
2324 E Bijou St.
Colorado Springs, CO 80909
(719) 633-4666

Education – PPRAA

For one-on-one amateur radio license and Morse code tutoring as well as practical hams skills classes.

Mike Anderson, WV7T
wv7t@arrl.net
719-229-8610

Education -Ham Radio School



HamRadioSchool.com is an integrated learning system developed by Stu Turner WØSTU and James Bucknall

KDØMFO of Monument, Colorado. Stu combines his skills as an engineer and educator with his enthusiasm for Amateur Radio in this excellent learning system's books for the Technician Class and General Class licenses. James maintains the complementary web site that includes an eMagazine of informative articles and section-by-section supplements to the license preparation books.

The HamRadioSchool.com system combines the best of proven traditional methods with new media to provide a learning experience like no other in amateur radio today! Using the fully coordinated book, web media, and mobile device apps, you will really get it – you will really understand ham radio and be prepared to ace your FCC licensing exam.

HamRadioSchool.com license preparation books are available on their web site, the HRO Denver store, and online at these retailers: Amazon.com, R&L Electronics, DX Engineering, Universal Radio.

Volunteer Examiner (VE) - EXAMS

Pikes Peak Radio Amateur Association (PPRAA)

When:

Feb, Apr, Jun, Aug, Oct, Dec
2nd Saturday at 9 AM

Location:

Colorado Technical University (CTU)
4435 North Chestnut
Colorado Springs, CO 80907

Directions:

<http://ppraa.org/ve-testing>
or contact:

Dan Martin
VE@PPRAA.org

Mountain Amateur Radio Club (MARC)

When:

Jan, Mar, May, Jul, Sep, Nov
1st Saturday at 10 AM

Location:

Woodland Park
Woodland Park Library-Community Meeting RM
218 East Midland Avenue

Directions:

<http://www.nx0g.org/ve.html>
or contact

Wes Wilson (KØHBZ)
k0hbx@arrl.net
Call (719) 687-8758

Applicants will need the following items at the session:

1. A valid **PHOTO ID**, driver's license preferred (if you do not have a valid photo ID, please call for alternative identification requirements).
2. Your **FRN** or **SOCIAL SECURITY NUMBER** (now required – this includes children).
3. Your **CURRENT ORIGINAL** amateur radio **license** (if any) **and** a **PHOTOCOPY** for the VE Team to keep.
4. The **CURRENT ORIGINAL CSCEs** you have **and** a **PHOTOCOPY** for the VE Team to keep.
5. Cash, Check or Money Order for \$15 (standard ARRL VE Fee). Checks and money orders should be made out to either PPRAA or MARC (site dependent). This covers all exams you wish to take at this VE session.

NOTE: PPRAA and MARC VE Team policy, as with many VE Teams, is to not allow same day retests on failed exams.

PPRAA – Colorado Spring testing only

Anyone passing their Technician Class examination at a PPRAA test session will receive a free year's membership to the Pikes Peak Radio Amateur Association.

Local happening

Hamfests

January 18th Northern Colorado ARC Hamfest Loveland, Colorado <http://www.ncarc.net/>

Check the ARRL Rocky Mountain Division website for other activities and last minute updates.

The web site can be found at: <http://www.rockymountaindivision.org/>

Organizations

Pikes Peak Amateur Radio Emergency Service (PPARES)

<http://www.pparaes.net>

Tri-Lakes Monument Fire Radio Association (WØTLM)

<http://www.w0t1m.com/main/>

Garden of the Gods Amateur Radio Club (GGARC)

<http://ggarc.org/>

Mountain Amateur Radio Club

<http://nx0g.org/>

Pueblo Ham Club

<http://pueblohamclub.com/>

Pueblo West Colorado Amateur Radio Club, Inc.

<http://www.qsl.net/na0pw/>

Pikes Peak FM Association (PPFMA)

<http://www.ppfma.org/>

Cheyenne Mountain Repeater Group

<http://www.ppfma.org/>

Ditz n Bitz

Do you have something to sell, trying to find something or just want to see something get to a good home? Send it in to zerobeat@ppraa.org and see it in Dits and Bits.

Also, visit the PPRAA Forum's online Ditz and Bitz [at www.pparaa.forumotion.net](http://www.pparaa.forumotion.net) !!

Ø-Beat

Please send your comments and suggestions related to the publication to: zerobeat@ppraa.org

Membership Application
Pikes Peak Radio Amateur Association, Inc.
P.O. Box 16521, Colorado Springs, Colorado 80935

Date: _____ ☐ New Membership ☐ Renewal

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Call: _____ License Class: _____ Telephone: _____

E-mail address: _____

Are you an ARRL member? ☐ Yes ☐ No

Additional Name: _____ Call _____ Class _____ ARRL member? ☐ Yes ☐ No

Additional Name: _____ Call _____ Class _____ ARRL member? ☐ Yes ☐ No

Additional Name: _____ Call _____ Class _____ ARRL member? ☐ Yes ☐ No

☐ Full Member - \$15.00

☐ Full Member over 65 - \$10.00

☐ Family Membership (same address) - \$18.00

☐ Family Membership (both over 65) - \$12.00